

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A semiconductor device comprising:
a driven circuit comprising a first transistor;
a signal line electrically connected to the first transistor through a node; and
a first precharge circuit electrically connected to the signal line and comprising a second

transistor;

wherein[[:]] a gate electrode of the first transistor is connected to a drain electrode of the first transistor through a switch,

wherein a gate electrode of the second transistor is electrically connected to a drain electrode of the second transistor,

wherein a gate width of the second transistor is larger than a gate width of the first transistor, and

wherein the first precharge circuit is configured to perform a precharge of the driven circuit ~~a precharge voltage is supplied to the node through the signal line~~ prior to supplying a signal current to the driven circuit.

2-6. (Cancelled)

7. (Previously Presented) The semiconductor device according to claim 1, further comprising an impedance transformation amplifier.

8-17. (Cancelled)

18. (Currently Amended) A semiconductor device comprising:
a driven circuit comprising a first transistor;
a precharge circuit comprising a second transistor;
a first switch for controlling an electrical connection between the driven circuit and the precharge circuit; and
a second switch for controlling an electrical connection between the driven circuit and ~~[[the]]~~a current source circuit~~[[.]]~~,
wherein a gate electrode of the first transistor is connected to a drain electrode of the first transistor through a third switch,
wherein a gate electrode of the second transistor is electrically connected to a drain electrode of the second transistor, and
wherein a gate width of the second transistor is larger than a gate width of the first transistor.

19. (Cancelled)

20. (Currently Amended) A semiconductor device comprising:
a driven circuit comprising a first transistor;
plural precharge circuits;
plural current source circuits configured to input ~~for inputting~~ a signal current to the driven circuit;
a first switch for controlling an electrical connection between the driven circuit and the plural precharge circuits; and
a second switch for controlling an electrical connection between the driven circuit and the plural current source circuits.

21. (Currently Amended) The semiconductor device according to claim 20, further comprising plural amplifier circuits ~~for amplifying~~ configured to amplify currents outputted from the plural precharge circuits.

22-27. (Cancelled)

28. (Currently Amended) The semiconductor device according to claim 18 [[22]], wherein a gate and a drain of the second transistor are connected to each other.

29-58. (Cancelled)

59. (Currently Amended) The semiconductor device according to claim 18, further comprising an amplifier circuit ~~for amplifying~~ configured to amplify a signal current outputted from the precharge circuit.

60. (Previously Presented) The semiconductor device according to claim 20, wherein at least one of the plural precharge circuits comprises a second transistor.

61-62. (Cancelled)

63. (Previously Presented) The semiconductor device according claim 60, wherein a gate and a drain of the second transistor are connected to each other.

64. (Previously Presented) The semiconductor device according to claim 7, wherein the impedance transformation amplifier is a source follower circuit.

65. (Previously Presented) The semiconductor device according to claim 21, wherein at least one of the plural amplifier circuits is a source follower circuit.

66. (Previously Presented) The semiconductor device according to claim 59, wherein the amplifier circuit is a source follower circuit.

67-70. (Cancelled)

71. (New) The semiconductor device according to claim 1, wherein a gate electrode of the second transistor is connected to the drain electrode of the second transistor.

72. (New) The semiconductor device according to claim 1, wherein the precharge is performed by supplying a precharge voltage to the node.

73. (New) The semiconductor device according to claim 1, wherein the precharge circuit is included in a current drive circuit.

74. (New) The semiconductor device according to claim 18, wherein the precharge circuit is included in a current drive circuit.

75. (New) The semiconductor device according to claim 20, wherein the plural precharge circuits and plural current source circuits are included in a current drive circuit.

76. (New) A semiconductor device comprising:
a driven circuit comprising a first transistor;
a signal line electrically connected to the first transistor through a node;
a first precharge circuit electrically connected to the signal line and comprising a second transistor;

wherein a gate electrode of the first transistor is connected to a drain electrode of the first transistor through a switch,

wherein a gate electrode of the second transistor is electrically connected to a drain electrode of the second transistor,

wherein a gate length of the second transistor is smaller than a gate length of the first transistor, and

wherein the first precharge circuit is configured to perform a precharge of the driven circuit prior to supplying a signal current to the driven circuit.

77. (New) The semiconductor device according to claim 76, further comprising an impedance transformation amplifier.

78. (New) The semiconductor device according to claim 76, wherein a gate electrode of the second transistor is connected to the drain electrode of the second transistor.

79. (Previously Presented) The semiconductor device according to claim 77, wherein the impedance transformation amplifier is a source follower circuit.

80. (New) The semiconductor device according to claim 76, wherein the precharge is performed by supplying a precharge voltage to the node.

81. (New) The semiconductor device according to claim 76, wherein the precharge circuit is included in a current drive circuit.

82. (New) A semiconductor device comprising:
a driven circuit comprising a first transistor;
a precharge circuit comprising a second transistor;
a first switch for controlling an electrical connection between the driven circuit and the precharge circuit; and
a second switch for controlling an electrical connection between the driven circuit and a current source circuit,
wherein a gate electrode of the first transistor is connected to a drain electrode of the first transistor through a third switch,
wherein a gate electrode of the second transistor is electrically connected to a drain electrode of the second transistor, and
wherein a gate length of the second transistor is smaller than a gate length of the first transistor.

83. (New) The semiconductor device according to claim 82, further comprising a current source circuit configured to input a signal current to the driven circuit.

84. (New) The semiconductor device according to claim 82, further comprising an amplifier circuit configured to amplify a signal current outputted from the precharge circuit.

85. (New) The semiconductor device according to claim 82, wherein the gate and the drain of the second transistor are connected to each other.

86. (Previously Presented) The semiconductor device according to claim 84, wherein the amplifier circuit is a source follower circuit.

87. (New) The semiconductor device according to claim 82, wherein the precharge circuit is included in a current drive circuit.